

Exhibit 7**Apportionment Assessment of Patent '205****Hybrid code execution****Patent Functionality**

- The '205 patent invention is related to Just-In-Time (JIT) compilation in an environment that can both interpret bytecode or execute corresponding native instructions. [1]
- The '205 patent provides a way to improve execution speed selectively using native code instead of interpreted bytecode (inlining). [2]

Contemporaneous Evidence

- "Up until Android 2.2 (Froyo) the JVM (really a Dalvik JVM for licensing reasons) on the Android platform was playing with one hand tied behind its back." [3]
- "Ran them all through Linpack, and the numbers hold up. We're seeing scores on Android 2.2 that are 600 percent or so higher than on Android 2.1." [4]
- "We added a Just In Time (JIT) compiler to the Dalvik VM. The JIT is a software component which takes application code, analyzes it, and actively translates it into a form that runs faster, doing so while the application continues to run. ... On the performance front in particular, we have seen realistic improvements of 2x to 5x for CPU-bound code, compared to the previous version of the Dalvik VM. This is equivalent to about 4x to 10x faster than a more traditional interpreter implementation." [5]
- Regarding the JIT, Qualcomm noted that "[t]he performance improvement up to 5x is quite exciting." [6]

Benchmarking Evidence

- Vandette report performance benchmark testing shows as much as 3.3 times execution speed improvement. [7]
- Linpack testing shows a five fold increase when enabling the '205 patent. This test reflects the performance of the Android Dalvik Virtual Machine. Since applications run on this virtual machine, it is also a measure of application performance. [8]
- The benchmarking generated to date does not quantify the impact of the inlining claim on performance. [9]

Econometric Analysis

- Willingness to pay analysis provides evidence that consumers value performance features enabled by patents '104 and '205 as measured by Linpack. [10]
- Speed improvement driven by patent '104 and '205 is associated with an average \$31-\$37 increase in consumer's willingness to pay for handsets. [11]
- Consumers are less likely to purchase handsets with lower performance. [12]
- Analysis suggests patent apportionment in the range of 30% - 40%. [13]

Conjoint Analysis

- Analysis suggests that consumers value faster phones. [14]
- The '205 patent does not improve application launch times by itself. [15]

Opinion

- 25% apportionment
- Estimated patent damages after U.S. adjustment: \$168.2 million

Exhibit 7 (continued)
Apportionment Assessment of Patent '205
Hybrid code execution

Sources:

- [1] Mitchell Patent Report, p. 32.
- [2] Mitchell Patent Report, p. 39.
- [3] See, e.g., <http://developer.android.com/sdk/android-2.2-highlights.html> (advertising, for Android 2.2 Platform Highlights, “Improved performance,” including 2x-5x performance speedup for CPU-heavy code over Android 2.1 with Dalvik JIT); <http://www.javarants.com/2010/05/26/android-dalvik-vm-performance-is-a-threat-to-the-iphone/>
- [4] <http://www.androidcentral.com/benchmarking-android-22-froyo-against-android-21-eclair> (Benchmarking Android 2.2 (Froyo) and the JIT against Android 2.1 (Éclair))
- [5] "Dalvik JIT," Android Developers Blog, May 25, 2010, accessed at <http://android-developers.blogspot.com/2010/05/dalvik-jit.html>
- [6] GOOGLE-61-00012446 (e-mail thread from April 20, 2009, between Qualcomm employees and Google employees.
- [7] Vandette Report, p. 24.
- [8] Exhibit 3
- [9] See Vandette Report; See Vandette Report ¶ 61-62
- [10] See Appendix C.
- [11] See Appendix C.
- [12] See Appendix C.
- [13] See Appendix C.
- [14] See Shugan report.
- [15] Exhibit 4